

## SEQUENCE LISTING

<110> LIU, CHUAN-FA  
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 CHEETHAM, JANET  
 BOONE, THOMAS CHARLES

<120> MODIFIED PEPTIDES AS THERAPEUTIC AGENTS

<130> A-527

<140> NOT YET RECEIVED

<141> 1999-10-22

<150> 60/105,371

<151> 1998-10-23

<160> 1133

<170> PatentIn Ver. 2.1

<210> 1

<211> 684

<212> DNA

<213> HUMAN

<220>

<221> CDS

<222> (1)..(684)

<400> 1

atg gac aaa act cac aca tgt cca cct tgt cca gct ccg gaa ctc ctg	48
Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu	
1 5 10 15	
ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc	96
Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu	
20 25 30	
atg atc tcc ccg acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc	144
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser	
35 40 45	
cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag	192
His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu	
50 55 60	
gtg cat aat gcc aag aca aag ccg ccg gag gag cag tac aac agc acg	240

Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr		
65					70					75					80		
tac	cgt	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	cag	gac	tgg	ctg	aat	288	
Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn		
				85					90					95			
ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc	aac	aaa	gcc	ctc	cca	gcc	ccc	336	
Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro		
			100					105					110				
atc	gag	aaa	acc	atc	tcc	aaa	gcc	aaa	ggg	cag	ccc	cga	gaa	cca	cag	384	
Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln		
		115					120				125						
gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	acc	aag	aac	cag	gtc	432	
Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val		
	130					135					140						
agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	atc	gcc	gtg	480	
Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val		
145				150						155					160		
gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	acc	acg	cct	528	
Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro		
				165					170					175			
ccc	gtg	ctg	gac	tcc	gac	ggc	tcc	ttc	ttc	ctc	tac	agc	aag	ctc	acc	576	
Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr		
			180					185					190				
gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	tgc	tcc	gtg	624	
Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val		
		195				200					205						
atg	cat	gag	gct	ctg	cac	aac	cac	tac	acg	cag	aag	agc	ctc	tcc	ctg	672	
Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu		
	210					215					220						
tct	ccg	ggt	aaa													684	
Ser	Pro	Gly	Lys														
225																	

&lt;210&gt; 2

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; HUMAN

&lt;400&gt; 2

Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu  
 1 5 10 15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu  
 20 25 30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser  
 35 40 45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu  
 50 55 60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr  
 65 70 75 80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn  
 85 90 95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro  
 100 105 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln  
 115 120 125

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val  
 130 135 140

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val  
 145 150 155 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro  
 165 170 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr  
 180 185 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val  
 195 200 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu  
 210 215 220

Ser Pro Gly Lys  
 225

<210> 3  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PEGYLATED  
PEPTIDE

<400> 3  
Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala  
1 5 10 15

Arg Ala

<210> 4  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: PEGYLATED  
PEPTIDE

<400> 4  
Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala  
1 5 10 15

Arg Ala

<210> 5  
<211> 794  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Fc-TMP

<220>  
<221> CDS  
<222> (39) .. (779)

&lt;400&gt; 5

tctagatttg ttttaactaa ttaaaggagg aataacat atg gac aaa act cac aca 56

Met Asp Lys Thr His Thr

1

5

tgt cca cct tgt cca gct ccg gaa ctc ctg ggg gga ccg tca gtc ttc 104

Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe

10

15

20

ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg acc cct 152

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro

25

30

35

gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc 200

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val

40

45

50

aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc aag aca 248

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr

55

60

65

70

aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg gtc agc gtc 296

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val

75

80

85

ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag tac aag tgc 344

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys

90

95

100

aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa acc atc tcc 392

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser

105

110

115

aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc ctg ccc cca 440

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro

120

125

130

tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc ctg gtc 488

Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val

135

140

145

150

aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc aat ggg 536

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly

155

160

165

cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gac tcc gac 584

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp

170	175	180	
ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc agg tgg			632
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp			
185	190	195	
cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct ctg cac			680
Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His			
200	205	210	
aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt aaa ggt gga			728
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys Gly Gly			
215	220	225	230
ggg ggt ggt atc gaa ggt ccg act ctg cgt cag tgg ctg gct gct cgt			776
Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg			
235	240	245	
gct taatctcgag gatcc			794
Ala			

&lt;210&gt; 6

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;223&gt; Description of Artificial Sequence:Fc-TMP

&lt;400&gt; 6

Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
1 5 10 15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
20 25 30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
35 40 45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
50 55 60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
65 70 75 80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
85 90 95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
---

100	105	110
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln 115	120	125
Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val 130	135	140
Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val 145	150	155 160
Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro 165	170	175
Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr 180	185	190
Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val 195	200	205
Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu 210	215	220
Ser Pro Gly Lys Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg 225	230	235 240
Gln Trp Leu Ala Ala Arg Ala 245		

&lt;210&gt; 7

&lt;211&gt; 861

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Fc-TMP-TMP

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (39) .. (842)

&lt;400&gt; 7

tctagatttg ttttaactaa ttaaaggagg aataacat atg gac aaa act cac aca 56  
Met Asp Lys Thr His Thr

1

5

tgt cca cct tgt cca gct ccg gaa ctc ctg ggg gga ccg tca gtc ttc	104
Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe	
10 15 20	
ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg acc cct	152
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro	
25 30 35	
gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc	200
Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val	
40 45 50	
aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc aag aca	248
Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr	
55 60 65 70	
aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg gtc agc gtc	296
Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val	
75 80 85	
ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag tac aag tgc	344
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys	
90 95 100	
aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa acc atc tcc	392
Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser	
105 110 115	
aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc ctg ccc cca	440
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro	
120 125 130	
tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc ctg gtc	488
Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val	
135 140 145 150	
aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc aat ggg	536
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly	
155 160 165	
cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gac tcc gac	584
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp	
170 175 180	
ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc agg tgg	632
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp	
185 190 195	



cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct ctg cac 680  
 Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His  
 200 205 210

aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt aaa ggt gga 728  
 Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys Gly Gly  
 215 220 225 230

ggt ggt ggt atc gaa ggt ccg act ctg cgt cag tgg ctg gct gct cgt 776  
 Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg  
 235 240 245

gct ggt ggt gga ggt ggc ggc gga ggt att gag ggc cca acc ctt cgc 824  
 Ala Gly Gly Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg  
 250 255 260

caa tgg ctt gca gca cgc gcataatctc gaggatccg 861  
 Gln Trp Leu Ala Ala Arg  
 265

<210> 8

<211> 268

<212> PRT

<213> Artificial Sequence

<223> Description of Artificial Sequence:Fc-TMP-TMP

<400> 8

Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu  
 1 5 10 15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu  
 20 25 30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser  
 35 40 45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu  
 50 55 60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr  
 65 70 75 80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn  
 85 90 95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro  
 100 105 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln  
 115 120 125  
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val  
 130 135 140  
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val  
 145 150 155 160  
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro  
 165 170 175  
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr  
 180 185 190  
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val  
 195 200 205  
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu  
 210 215 220  
 Ser Pro Gly Lys Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg  
 225 230 235 240  
 Gln Trp Leu Ala Ala Arg Ala Gly Gly Gly Gly Gly Gly Gly Ile  
 245 250 255  
 Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg  
 260 265

<210> 9  
 <211> 855  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:TMP-TMP-Fc

<220>  
 <221> CDS  
 <222> (39) .. (845)

<400> 9  
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 Met Ile Glu Gly Pro Thr

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ctg	cgt	cag	tgg	ctg	gct	gct	cgt	gct	ggc	ggt	ggt	ggc	gga	ggg	ggt	104		
Leu	Arg	Gln	Trp	Leu	Ala	Ala	Arg	Ala	Gly	Gly	Gly	Gly	Gly	Gly	Gly			
				10					15					20				
ggc	att	gag	ggc	cca	acc	ctt	cgc	caa	tgg	ctt	gca	gca	cgc	gca	ggg	152		
Gly	Ile	Glu	Gly	Pro	Thr	Leu	Arg	Gln	Trp	Leu	Ala	Ala	Arg	Ala	Gly			
				25					30					35				
gga	ggc	ggt	ggg	gac	aaa	act	cac	aca	tgt	cca	cct	tgc	cca	gca	cct	200		
Gly	Gly	Gly	Gly	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro			
				40					45					50				
gaa	ctc	ctg	ggg	gga	ccg	tca	gtt	ttc	ctc	ttc	ccc	cca	aaa	ccc	aag	248		
Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys			
				55					60					65				
gac	acc	ctc	atg	atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	gtg	gtg	296		
Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val			
				75					80					85				
gac	gtg	agc	cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	gtg	gac	344		
Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp			
				90					95					100				
ggc	gtg	gag	gtg	cat	aat	gcc	aag	aca	aag	ccg	cgg	gag	gag	cag	tac	392		
Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr			
				105					110					115				
aac	agc	acg	tac	cgt	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	cag	gac	440		
Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp			
				120					125					130				
tgg	ctg	aat	ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc	aac	aaa	gcc	ctc	488		
Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu			
				135					140					145				
cca	gcc	ccc	atc	gag	aaa	acc	atc	tcc	aaa	gcc	aaa	ggg	cag	ccc	cga	536		
Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg			
				155					160					165				
gaa	cca	cag	gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	acc	aag	584		
Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys			
				170					175					180				
aac	cag	gtc	agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	632		
Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp			

185	190	195	
atc gcc gtg gag tgg gag agc aat ggg cag ccg gag aac aac tac aag			680
Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys			
200	205	210	
acc acg cct ccc gtg ctg gac tcc gac ggc tcc ttc ttc ctc tac agc			728
Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser			
215	220	225	230
aag ctc acc gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca			776
Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser			
235	240	245	
tgc tcc gtg atg cat gag gct ctg cac aac cac tac acg cag aag agc			824
Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser			
250	255	260	
ctc tcc ctg tct ccg ggt aaa taatggatcc			855
Leu Ser Leu Ser Pro Gly Lys			
265			

&lt;210&gt; 10

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;223&gt; Description of Artificial Sequence:TMP-TMP-Fc

&lt;400&gt; 10

Met	Ile	Glu	Gly	Pro	Thr	Leu	Arg	Gln	Trp	Leu	Ala	Ala	Arg	Ala	Gly
1				5				10					15		

Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ile	Glu	Gly	Pro	Thr	Leu	Arg	Gln	Trp
		20					25						30		

Leu	Ala	Ala	Arg	Ala	Gly	Gly	Gly	Gly	Gly	Asp	Lys	Thr	His	Thr	Cys
		35					40					45			

Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu
		50				55					60				

Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu
65					70					75				80	

Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys
				85					90					95	

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
 100 105 110  
 Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu  
 115 120 125  
 Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
 130 135 140  
 Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
 145 150 155 160  
 Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
 165 170 175  
 Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
 180 185 190  
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
 195 200 205  
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly  
 210 215 220  
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln  
 225 230 235 240  
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn  
 245 250 255  
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 260 265

&lt;210&gt; 11

&lt;211&gt; 789

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:TMP-Fc

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (39)-(779)

&lt;400&gt; 11

tctagatttg ttttaactaa ttaaaggagg aataacat atg atc gaa ggt ccg act 56  
Met Ile Glu Gly Pro Thr  
1 5

ctg cgt cag tgg ctg gct gct cgt gct ggt gga ggc ggt ggg gac aaa 104  
Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly Gly Gly Gly Asp Lys  
10 15 20

act cac aca tgt cca cct tgc cca gca cct gaa ctc ctg ggg gga ccg 152  
Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro  
25 30 35

tca gtt ttc ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc 200  
Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser  
40 45 50

cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac 248  
Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp  
55 60 65 70

cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat 296  
Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn  
75 80 85

gcc aag aca aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg 344  
Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val  
90 95 100

gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag 392  
Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu  
105 110 115

tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa 440  
Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
120 125 130

acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc 488  
Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
135 140 145 150

ctg ccc cca tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc 536  
Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr  
155 160 165

tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag 584  
Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu  
170 175 180

agc aat ggg cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg 632  
 Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu  
 185 190 195

gac tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag 680  
 Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys  
 200 205 210

agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag 728  
 Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu  
 215 220 225 230

gct ctg cac aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt 776  
 Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly  
 235 240 245

aaa taatggatcc 789  
 Lys

<210> 12

<211> 247

<212> PRT

<213> Artificial Sequence

<223> Description of Artificial Sequence:TMP-Fc

<400> 12

Met Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly  
 1 5 10 15

Gly Gly Gly Gly Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro  
 20 25 30

Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys  
 35 40 45

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val  
 50 55 60

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp  
 65 70 75 80

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr  
 85 90 95

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp  
 100 105 110

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu  
 115 120 125  
 Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg  
 130 135 140  
 Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys  
 145 150 155 160  
 Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp  
 165 170 175  
 Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys  
 180 185 190  
 Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser  
 195 200 205  
 Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser  
 210 215 220  
 Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser  
 225 230 235 240  
 Leu Ser Leu Ser Pro Gly Lys  
 245

&lt;210&gt; 13

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:TMP

&lt;400&gt; 13

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
 1 5 10

&lt;210&gt; 14

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence



&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:TMP-TMP

&lt;400&gt; 14

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Gly Gly  
 1 5 10 15

Gly Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu  
 20 25 30

Ala Ala Arg Ala  
 35

&lt;210&gt; 15

&lt;211&gt; 812

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Fc-EMP

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (39)..(797)

&lt;400&gt; 15

tctagatttg ttttaactaa ttaaaggagg aataacat atg gac aaa act cac aca 56  
 Met Asp Lys Thr His Thr  
 1 5

tgt cca cct tgt cca gct ccg gaa ctc ctg ggg gga ccg tca gtc ttc 104  
 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe  
 10 15 20

ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg acc cct 152  
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro  
 25 30 35

gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc 200  
 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val  
 40 45 50

aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc aag aca 248  
 Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr  
 55 60 65 70

aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg gtc agc gtc	296
Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val	
75 80 85	
ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag tac aag tgc	344
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys	
90 95 100	
aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa acc atc tcc	392
Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser	
105 110 115	
aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc ctg ccc cca	440
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro	
120 125 130	
tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc ctg gtc	488
Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val	
135 140 145 150	
aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc aat ggg	536
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly	
155 160 165	
cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gac tcc gac	584
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp	
170 175 180	
ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc agg tgg	632
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp	
185 190 195	
cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct ctg cac	680
Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His	
200 205 210	
aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt aaa ggt gga	728
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys Gly Gly	
215 220 225 230	
ggt ggt ggt gga ggt act tac tct tgc cac ttc ggc ccg ctg act tgg	776
Gly Gly Gly Gly Gly Thr Tyr Ser Cys His Phe Gly Pro Leu Thr Trp	
235 240 245	
gtt tgc aaa ccg cag ggt ggt taatctcgtg gatcc	812
Val Cys Lys Pro Gln Gly Gly	
250	

&lt;210&gt; 16

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;223&gt; Description of Artificial Sequence:Fc-EMP

&lt;400&gt; 16

Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu  
 1 5 10 15

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu  
 20 25 30

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser  
 35 40 45

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu  
 50 55 60

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr  
 65 70 75 80

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn  
 85 90 95

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro  
 100 105 110

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln  
 115 120 125

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val  
 130 135 140

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val  
 145 150 155 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro  
 165 170 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr  
 180 185 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val  
 195 200 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu

210	215	220
Ser Pro Gly Lys Gly Gly Gly Gly Gly Gly Gly Thr Tyr Ser Cys His		
225	230	235 240
Phe Gly Pro Leu Thr Trp Val Cys Lys Pro Gln Gly Gly		
	245	250

<210> 17  
 <211> 807  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:EMP-Fc

<220>  
 <221> CDS  
 <222> (39)..(797)

<400> 17  
 tctagatttg ttttaactaa ttaaaggagg aataacat atg gga ggt act tac tct 56  
 Met Gly Gly Thr Tyr Ser  
 1 5

tgc cac ttc ggc ccg ctg act tgg gta tgt aag cca caa ggg ggt ggg 104  
 Cys His Phe Gly Pro Leu Thr Trp Val Cys Lys Pro Gln Gly Gly Gly  
 10 15 20

gga ggc ggg ggg gac aaa act cac aca tgt cca cct tgc cca gca cct 152  
 Gly Gly Gly Gly Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro  
 25 30 35

gaa ctc ctg ggg gga ccg tca gtt ttc ctc ttc ccc cca aaa ccc aag 200  
 Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys  
 40 45 50

gac acc ctc atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg 248  
 Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val  
 55 60 65 70

gac gtg agc cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac 296  
 Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp  
 75 80 85

ggc gtg gag gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac 344

Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr		
			90					95					100				
aac	agc	acg	tac	cgt	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	cag	gac	392	
Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp		
		105					110					115					
tgg	ctg	aat	ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc	aac	aaa	gcc	ctc	440	
Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu		
		120				125					130						
cca	gcc	ccc	atc	gag	aaa	acc	atc	tcc	aaa	gcc	aaa	ggg	cag	ccc	cga	488	
Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg		
135					140					145					150		
gaa	cca	cag	gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	acc	aag	536	
Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys		
			155					160						165			
aac	cag	gtc	agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	584	
Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp		
		170					175						180				
atc	gcc	gtg	gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	632	
Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys		
		185					190					195					
acc	acg	cct	ccc	gtg	ctg	gac	tcc	gac	ggc	tcc	ttc	ttc	ctc	tac	agc	680	
Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser		
		200				205					210						
aag	ctc	acc	gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	728	
Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser		
215					220					225					230		
tgc	tcc	gtg	atg	cat	gag	gct	ctg	cac	aac	cac	tac	acg	cag	aag	agc	776	
Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser		
			235					240						245			
ctc	tcc	ctg	tct	ccg	ggt	aaa	taatggatcc									807	
Leu	Ser	Leu	Ser	Pro	Gly	Lys											
			250														

&lt;210&gt; 18

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

## &lt;223&gt; Description of Artificial Sequence:EMP-Fc

&lt;400&gt; 18

Met Gly Gly Thr Tyr Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys  
 1 5 10 15

Lys Pro Gln Gly Gly Gly Gly Gly Gly Gly Asp Lys Thr His Thr Cys  
 20 25 30

Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu  
 35 40 45

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
 50 55 60

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys  
 65 70 75 80

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
 85 90 95

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu  
 100 105 110

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
 115 120 125

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
 130 135 140

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
 145 150 155 160

Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
 165 170 175

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
 180 185 190

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly  
 195 200 205

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln  
 210 215 220

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn  
 225 230 235 240

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 245 250

<210> 19

<211> 881

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:EMP-EMP-Fc

<220>

<221> CDS

<222> (41)..(871)

<400> 19

tctagatttg agttttaact tttagaagga ggaataaaat atg gga ggt act tac	55
Met Gly Gly Thr Tyr	
1 5	
tct tgc cac ttc ggc cca ctg act tgg gtt tgc aaa ccg cag ggt ggc	103
Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys Lys Pro Gln Gly Gly	
10 15 20	
ggc ggc ggc ggc ggt ggt acc tat tcc tgt cat ttt ggc ccg ctg acc	151
Gly Gly Gly Gly Gly Gly Thr Tyr Ser Cys His Phe Gly Pro Leu Thr	
25 30 35	
tgg gta tgt aag cca caa ggg ggt ggg gga ggc ggg ggg gac aaa act	199
Trp Val Cys Lys Pro Gln Gly Gly Gly Gly Gly Gly Gly Asp Lys Thr	
40 45 50	
cac aca tgt cca cct tgc cca gca cct gaa ctc ctg ggg gga ccg tca	247
His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser	
55 60 65	
gtt ttc ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg	295
Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg	
70 75 80 85	
acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct	343
Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro	
90 95 100	
gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc	391
Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala	



105	110	115	
aag aca aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg gtc			439
Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val			
120	125	130	
agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag tac			487
Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr			
135	140	145	
aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa acc			535
Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr			
150	155	160	165
atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc ctg			583
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu			
170	175	180	
ccc cca tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc			631
Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys			
185	190	195	
ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc			679
Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser			
200	205	210	
aat ggg cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gac			727
Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp			
215	220	225	
tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc			775
Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser			
230	235	240	245
agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct			823
Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala			
250	255	260	
ctg cac aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt aaa			871
Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys			
265	270	275	
taatggatcc			881

&lt;210&gt; 20

&lt;211&gt; 277

&lt;212&gt; PRT



&lt;213&gt; Artificial Sequence

&lt;223&gt; Description of Artificial Sequence:EMP-EMP-Fc

&lt;400&gt; 20

Met Gly Gly Thr Tyr Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys  
 1 5 10 15

Lys Pro Gln Gly Gly Gly Gly Gly Gly Gly Thr Tyr Ser Cys His  
 20 25 30

Phe Gly Pro Leu Thr Trp Val Cys Lys Pro Gln Gly Gly Gly Gly Gly  
 35 40 45

Gly Gly Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu  
 50 55 60

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr  
 65 70 75 80

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val  
 85 90 95

Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val  
 100 105 110

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser  
 115 120 125

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu  
 130 135 140

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala  
 145 150 155 160

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro  
 165 170 175

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln  
 180 185 190

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala  
 195 200 205

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr  
 210 215 220

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu  
 225 230 235 240

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser  
 245 250 255

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser  
 260 265 270

Leu Ser Pro Gly Lys  
 275

<210> 21

<211> 884

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Fc-EMP-EMP

<220>

<221> CDS

<222> (39) .. (869)

<400> 21

tctagatttg ttttaactaa ttaaaggagg aataacat atg gac aaa act cac aca 56  
 Met Asp Lys Thr His Thr  
 1 5

tgt cca cct tgc cca gca cct gaa ctc ctg ggg gga ccg tca gtt ttc 104  
 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe  
 10 15 20

ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg acc cct 152  
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro  
 25 30 35

gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc 200  
 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val  
 40 45 50

aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc aag aca 248  
 Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr  
 55 60 65 70

aag ccg cgg gag gag cag tac aac agc acg tac cgt gtg gtc agc gtc 296  
 Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val  
 75 80 85

ctc acc gtc ctg cac cag gac tgg ctg aat ggc aag gag tac aag tgc	344
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys	
90 95 100	
aag gtc tcc aac aaa gcc ctc cca gcc ccc atc gag aaa acc atc tcc	392
Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser	
105 110 115	
aaa gcc aaa ggg cag ccc cga gaa cca cag gtg tac acc ctg cct cca	440
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro	
120 125 130	
tcc cgg gat gag ctg acc aag aac cag gtc agc ctg acc tgc ctg gtc	488
Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val	
135 140 145 150	
aaa ggc ttc tat ccc agc gac atc gcc gtg gag tgg gag agc aat ggg	536
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly	
155 160 165	
cag ccg gag aac aac tac aag acc acg cct ccc gtg ctg gac tcc gac	584
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp	
170 175 180	
ggc tcc ttc ttc ctc tac agc aag ctc acc gtg gac aag agc agg tgg	632
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp	
185 190 195	
cag cag ggg aac gtc ttc tca tgc tcc gtg atg cat gag gct ctg cac	680
Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His	
200 205 210	
aac cac tac acg cag aag agc ctc tcc ctg tct ccg ggt aaa ggt gga	728
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys Gly Gly	
215 220 225 230	
ggt ggt ggc gga ggt act tac tct tgc cac ttc ggc cca ctg act tgg	776
Gly Gly Gly Gly Gly Thr Tyr Ser Cys His Phe Gly Pro Leu Thr Trp	
235 240 245	
gtt tgc aaa ccg cag ggt ggc ggc ggc ggc ggc ggt ggt acc tat tcc	824
Val Cys Lys Pro Gln Gly Gly Gly Gly Gly Gly Gly Gly Thr Tyr Ser	
250 255 260	
tgt cat ttt ggc ccg ctg acc tgg gta tgt aag cca caa ggg ggt	869
Cys His Phe Gly Pro Leu Thr Trp Val Cys Lys Pro Gln Gly Gly	
265 270 275	

taatctcgag gatcc

884

&lt;210&gt; 22

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;223&gt; Description of Artificial Sequence:Fc-EMP-EMP

&lt;400&gt; 22

Met	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu
1				5					10					15	

Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu
			20					25					30		

Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser
		35					40					45			

His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu
	50					55					60				

Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr
65					70					75					80

Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn
				85					90					95	

Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro
			100					105					110		

Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln
		115					120					125			

Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val
	130					135					140				

Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val
145					150					155					160

Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro
				165					170					175	

Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr
			180					185					190		

Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

195	200	205
Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu		
210	215	220
Ser Pro Gly Lys Gly Gly Gly Gly Gly Gly Gly Thr Tyr Ser Cys His		
225	230	235 240
Phe Gly Pro Leu Thr Trp Val Cys Lys Pro Gln Gly Gly Gly Gly Gly		
	245	250 255
Gly Gly Gly Thr Tyr Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys		
	260	265 270
Lys Pro Gln Gly Gly		
275		

<210> 23  
 <211> 1545  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:pAMG216

<400> 23

cgtaacgtat	gcatggtctc	cccatgcgag	agtagggaac	tgccaggcat	caaataaaac	60
gaaaggctca	gtcgaaagac	tgggcctttc	gttttatctg	ttgtttgtcg	gtgaacgctc	120
tcctgagtag	gacaaatccg	ccgggagcgg	atltgaacgt	tgcgaagcaa	cggcccggag	180
ggtggcgggc	aggacgcccg	ccataaactg	ccaggcatca	aattaagcag	aaggccatcc	240
tgacggatgg	ccttttttgcg	tttctacaaa	ctcttttgtt	tattttttcta	aatacattca	300
aatatggacg	tcgtacttaa	cttttaaagt	atgggcaatc	aattgctcct	gttaaaattg	360
ctttagaaat	actttggcag	cggtttgttg	tattgagttt	catttgcgca	ttggttaaatt	420
ggaaagtgac	cgtgcgctta	ctacagccta	atatttttga	aatatcccaa	gagctttttc	480
cttcgcatgc	ccacgctaaa	cattcttttt	ctcttttggg	taaatcgttg	tttgatttat	540
tatttgctat	atltatlttt	cgataattat	caactagaga	aggaacaatt	aatgggtatgt	600
tcatacacgc	atgtaaaaat	aaactatcta	tatagttgtc	tttctctgaa	tgtgcaaaac	660
taagcattcc	gaagccatta	ttagcagtat	gaatagggaa	actaaaccca	gtgataagac	720
ctgatgattt	cgcttcttta	attacatttg	gagatttttt	atltacagca	ttgttttcaa	780
atatattcca	attaatcggt	gaatgattgg	agttagaata	atctactata	ggatcatatt	840
ttatttaaatt	agcgtcatca	taatattgcc	tccatttttt	agggttaatta	tccagaattg	900
aaatatcaga	tttaaccata	gaatgaggat	aatgatcgc	gagtaaataa	tattcacaat	960
gtaccatttt	agtcatatca	gataagcatt	gattaatatc	attattgctt	ctacaggctt	1020
taattttatt	aattattctg	taagtgtcgt	cggcatttat	gtctttcata	cccatctctt	1080
tatccttacc	tattgtttgt	cgcaagtttt	gcgtgttata	tatcattaata	acggtaataag	1140
attgacattt	gattctaata	aattggattt	ttgtcacact	attatatcgc	ttgaaataca	1200

```

attgtttaac ataagtacct gtaggatcgt acaggtttac gcaagaaaat ggtttggttat 1260
agtcgattaa tcgatttgat tctagatttg ttttaactaa ttaaaggagg aataacatat 1320
ggttaacgcg ttggaattcg agctcactag tgtcgacctg cagggtacca tggaagctta 1380
ctcgaggatc cgcggaaaga agaagaagaa gaagaaagcc cgaaaggaag ctgagttggc 1440
tgctgccacc gctgagcaat aactagcata accccttggg gcctctaaac gggctctgag 1500
gggttttttg ctgaaaggag gaaccgctct tcacgctctt cacgc 1545

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<210> 24

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 24

```

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Lys Ala
  1             5             10

```

<210> 25

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 25

```

Ile Glu Gly Pro Thr Leu Arg Glu Trp Leu Ala Ala Arg Ala
  1             5             10

```

<210> 26

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<220>

<223> At position 15, Xaa=a linker sequence of 1 to 20 amino acids

<400> 26

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Xaa Ile  
1 5 10 15

Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
20 25

<210> 27

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC PEPTIDE

<220>

<223> At position 15, Xaa=a linker sequence of 1 to 20 amino acids

<400> 27

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Lys Ala Xaa Ile  
1 5 10 15

Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Lys Ala  
20 25

<210> 28

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC PEPTIDE

<220>

<223> At position 9 disulfide linkage with residue 24

<220>

<223> At position 24 disulfide linkage with residue 9

&lt;400&gt; 28

Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala Xaa Ile  
1 5 10 15

Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala  
20 25

&lt;210&gt; 29

&lt;211&gt; 31

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;220&gt;

<223> At position 16 bromoacetyl group linked to  
sidechain

&lt;400&gt; 29

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Xaa Lys  
1 5 10 15

Xaa Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
20 25 30

&lt;210&gt; 30

&lt;211&gt; 31

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;220&gt;

<223> At position 16 polyethylene glycol linked to  
sidechain

&lt;400&gt; 30

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Xaa Lys  
1 5 10 15



Xaa Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
                   20                  25                  30

<210> 31

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
 PEPTIDE

<220>

<223> At position 9 disulfide bond to residue 9 of a  
 separate identical sequence

<400> 31

Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala Xaa Ile  
      1                  5                  10                  15

Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala  
                   20                  25

<210> 32

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
 PEPTIDE

<220>

<223> At position 24 disulfide bond to residue 9 of a  
 separate identical sequence

<400> 32

Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala Xaa Ile  
      1                  5                  10                  15

Glu Gly Pro Thr Leu Arg Gln Cys Leu Ala Ala Arg Ala  
                   20                  25

<210> 33  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 33  
Val Arg Asp Gln Ile Xaa Xaa Xaa Leu  
1 5

<210> 34  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 34  
Thr Leu Arg Glu Trp Leu  
1 5

<210> 35  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 35  
Gly Arg Val Arg Asp Gln Val Ala Gly Trp  
1 5 10

<210> 36

<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 36

Gly Arg Val Lys Asp Gln Ile Ala Gln Leu  
1 5 10

<210> 37  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Description of  
Artificial SequenceTPO-MIMETIC PEPTIDE

<400> 37

Gly Val Arg Asp Gln Val Ser Trp Ala Leu  
1 5 10

<210> 38  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 38

Glu Ser Val Arg Glu Gln Val Met Lys Tyr  
1 5 10

<210> 39  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 39

Ser Val Arg Ser Gln Ile Ser Ala Ser Leu  
1 5 10

<210> 40

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 40

Gly Val Arg Glu Thr Val Tyr Arg His Met  
1 5 10

<210> 41

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:INTEGRIN  
BINDING PEPTIDE

<400> 41

Gly Val Arg Glu Val Ile Val Met His Met Leu  
1 5 10

<210> 42

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC

## PEPTIDE

&lt;400&gt; 42

Gly Arg Val Arg Asp Gln Ile Trp Ala Ala Leu  
1 5 10

&lt;210&gt; 43

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 43

Ala Gly Val Arg Asp Gln Ile Leu Ile Trp Leu  
1 5 10

&lt;210&gt; 44

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 44

Gly Arg Val Arg Asp Gln Ile Met Leu Ser Leu  
1 5 10

&lt;210&gt; 45

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 45

Gly Arg Val Arg Asp Gln Ile Xaa Xaa Xaa Leu  
1 5 10

<210> 46

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 46

Cys Thr Leu Arg Gln Trp Leu Gln Gly Cys  
1 5 10

<210> 47

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 47

Cys Thr Leu Gln Glu Phe Leu Glu Gly Cys  
1 5 10

<210> 48

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 48

Cys Thr Arg Thr Glu Trp Leu His Gly Cys  
1 5 10

<210> 49  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 49  
Cys Thr Leu Arg Glu Trp Leu His Gly Gly Phe Cys  
1 5 10

<210> 50  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Fc-TMP

<400> 50  
Cys Thr Leu Arg Glu Trp Val Phe Ala Gly Leu Cys  
1 5 10

<210> 51  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Fc-TMP

<400> 51  
Cys Thr Leu Arg Gln Trp Leu Ile Leu Leu Gly Met Cys  
1 5 10

<210> 52  
<211> 14  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 52

Cys Thr Leu Ala Glu Phe Leu Ala Ser Gly Val Glu Gln Cys  
1 5 10

<210> 53

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Fc-TMP

<400> 53

Cys Ser Leu Gln Glu Phe Leu Ser His Gly Gly Tyr Val Cys  
1 5 10

<210> 54

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Fc-TMP

<400> 54

Cys Thr Leu Arg Glu Phe Leu Asp Pro Thr Thr Ala Val Cys  
1 5 10

<210> 55

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE



&lt;400&gt; 55

Cys Thr Leu Lys Glu Trp Leu Val Ser His Glu Val Trp Cys  
1 5 10

&lt;210&gt; 56

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 56

Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Cys  
1 5 10

&lt;210&gt; 57

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 57

Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa Cys  
1 5 10

&lt;210&gt; 58

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 58

Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa Xaa Cys

1

5

10

&lt;210&gt; 59

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 59

Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa Xaa Xaa Cys  
1 5 10

&lt;210&gt; 60

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 60

Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa Xaa Xaa Xaa Cys  
1 5 10

&lt;210&gt; 61

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 61

Arg Glu Gly Pro Thr Leu Arg Gln Trp Met  
1 5 10

<210> 62  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 62  
Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala  
1 5 10

<210> 63  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 63  
Glu Arg Gly Pro Phe Trp Ala Lys Ala Cys  
1 5 10

<210> 64  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 64  
Arg Glu Gly Pro Arg Cys Val Met Trp Met  
1 5 10

<210> 65  
<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 65

Cys Gly Thr Glu Gly Pro Thr Leu Ser Thr Trp Leu Asp Cys  
1 5 10

<210> 66

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 66

Cys Glu Gln Asp Gly Pro Thr Leu Leu Glu Trp Leu Lys Cys  
1 5 10

<210> 67

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

<400> 67

Cys Glu Leu Val Gly Pro Ser Leu Met Ser Trp Leu Thr Cys  
1 5 10

<210> 68

<211> 14

<212> PRT

<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 68

Cys	Leu	Thr	Gly	Pro	Phe	Val	Thr	Gln	Trp	Leu	Tyr	Glu	Cys
1				5					10				

&lt;210&gt; 69

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 69

Cys	Arg	Ala	Gly	Pro	Thr	Leu	Leu	Glu	Trp	Leu	Thr	Leu	Cys
1				5				10					

&lt;210&gt; 70

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 70

Cys	Ala	Asp	Gly	Pro	Thr	Leu	Arg	Glu	Trp	Ile	Ser	Phe	Cys
1				5				10					

&lt;210&gt; 71

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 71

Cys Xaa Glu Gly Pro Thr Leu Arg Glu Trp Leu Xaa Cys  
1 5 10

&lt;210&gt; 72

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 72

Cys Xaa Xaa Glu Gly Pro Thr Leu Arg Glu Trp Leu Xaa Cys  
1 5 10

&lt;210&gt; 73

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 73

Cys Xaa Glu Gly Pro Thr Leu Arg Glu Trp Leu Xaa Xaa Cys  
1 5 10

&lt;210&gt; 74

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 74

Cys Xaa Xaa Glu Gly Pro Thr Leu Arg Glu Trp Leu Xaa Xaa Cys

1

5

10

15

&lt;210&gt; 75

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 75

Gly	Gly	Cys	Thr	Leu	Arg	Glu	Trp	Leu	His	Gly	Gly	Phe	Cys	Gly	Gly
1				5					10					15	

&lt;210&gt; 76

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 76

Gly	Gly	Cys	Ala	Asp	Gly	Pro	Thr	Leu	Arg	Glu	Trp	Ile	Ser	Phe	Cys
1				5					10					15	

Gly Gly

&lt;210&gt; 77

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 77

Gly Asn Ala Asp Gly Pro Thr Leu Arg Gln Trp Leu Glu Gly Arg Arg

1

5

10

15

Pro Lys Asn

&lt;210&gt; 78

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 78

Leu Ala Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu His Gly Asn Gly  
1 5 10 15

Arg Asp Thr

&lt;210&gt; 79

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 79

His Gly Arg Val Gly Pro Thr Leu Arg Glu Trp Lys Thr Gln Val Ala  
1 5 10 15

Thr Lys Lys

&lt;210&gt; 80

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence



&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 80

Thr Ile Lys Gly Pro Thr Leu Arg Gln Trp Leu Lys Ser Arg Glu His  
1 5 10 15

Thr Ser

&lt;210&gt; 81

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 81

Ile Ser Asp Gly Pro Thr Leu Lys Glu Trp Leu Ser Val Thr Arg Gly  
1 5 10 15

Ala Ser

&lt;210&gt; 82

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:TPO-MIMETIC  
PEPTIDE

&lt;400&gt; 82

Ser Ile Glu Gly Pro Thr Leu Arg Glu Trp Leu Thr Ser Arg Thr Pro  
1 5 10 15

His Ser

<210> 83  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:EPO-MIMETIC  
PEPTIDE

<400> 83  
Tyr Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp Xaa Cys Xaa Pro  
1 5 10

<210> 84  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:EPO-MIMETIC  
PEPTIDE

<400> 84  
Tyr Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp Xaa Cys Xaa Pro Tyr Xaa  
1 5 10 15

Cys Xaa Xaa Gly Pro Xaa Thr Trp Xaa Cys Xaa Pro  
20 25

<210> 85  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:EPO-MIMETIC  
PEPTIDE

<220>  
<223> At position 15, Xaa=a linker sequence of 1 to 20  
amino acids

<400> 85